



# HUMAN LANDING SYSTEM

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Space Generation Fusion Forum  
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Apollo 8



Apollo 10



Apollo 11



Apollo 12



Apollo 13



Apollo 14



Apollo 15



Apollo 16



Apollo 17





Apollo 11



Apollo 12



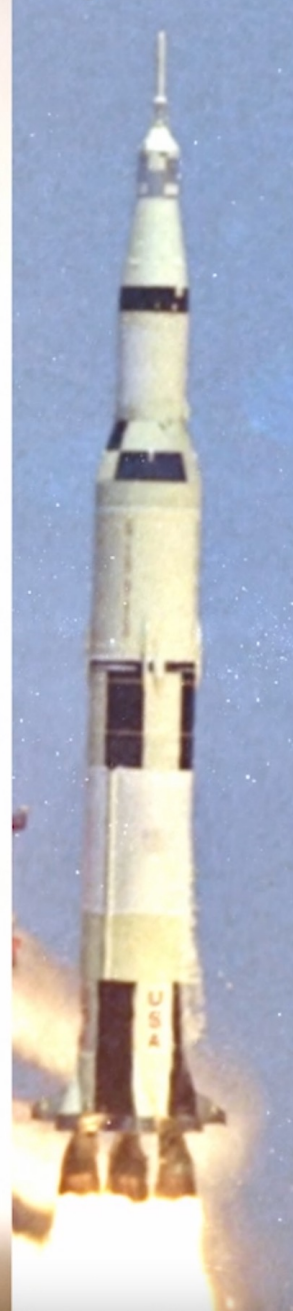
Apollo 14



Apollo 15



Apollo 16



Apollo 17



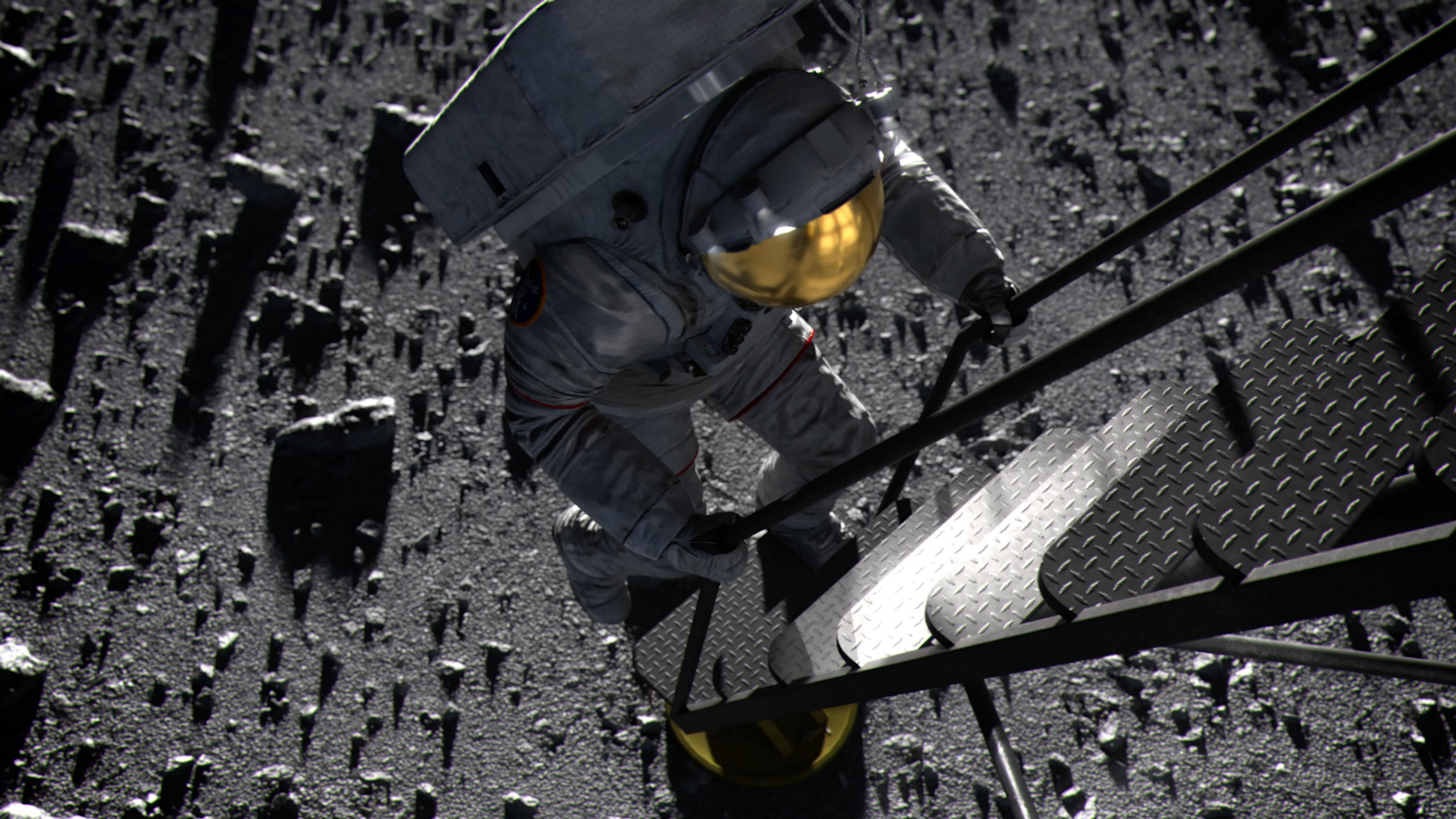














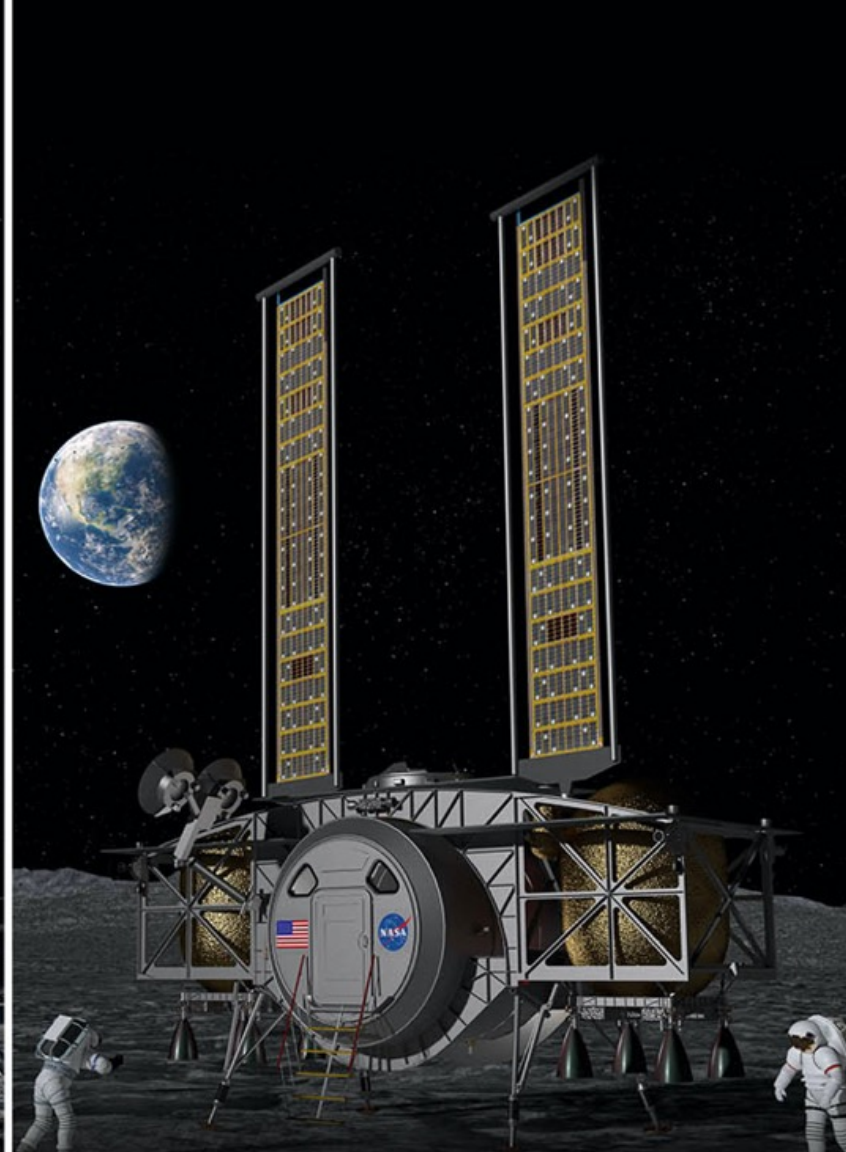


LOCKHEED MARTIN

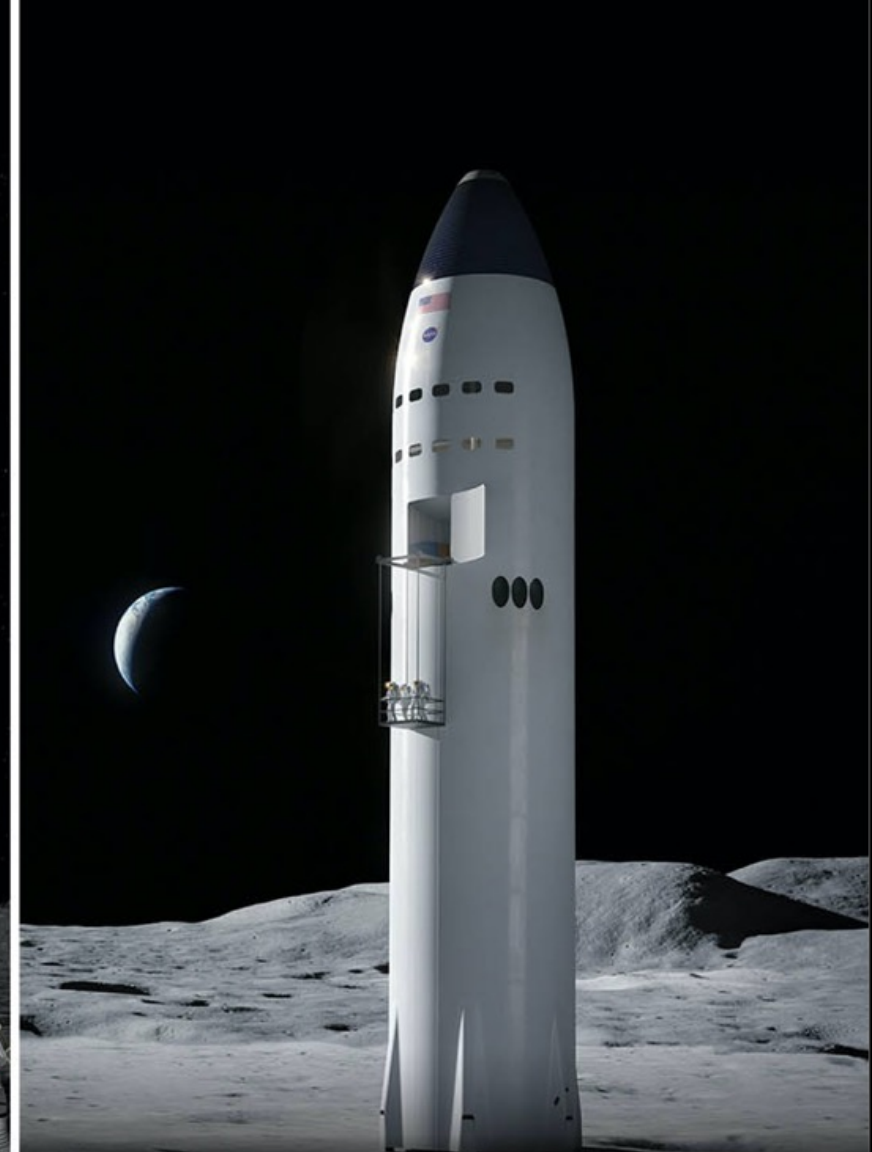
BLUE ORIGIN

NORTHROP GRUMMAN

DRAPER



**Dynetics**  
A Leidos Company



**SPACEX**



# Initial Human Landing System

# HLS

NASA has awarded SpaceX a contract to develop the human landing system that will put the next two Americans on the surface of the Moon.

The contract includes one uncrewed and one crewed demonstration mission, the first surface landing of Artemis.



Image Credit: SpaceX



# Option A Initial HLS Starship Progress



Crew and cargo elevator



Crew cabin VR evaluation



Airlock



Image Credit: SpaceX









Moon to Mars



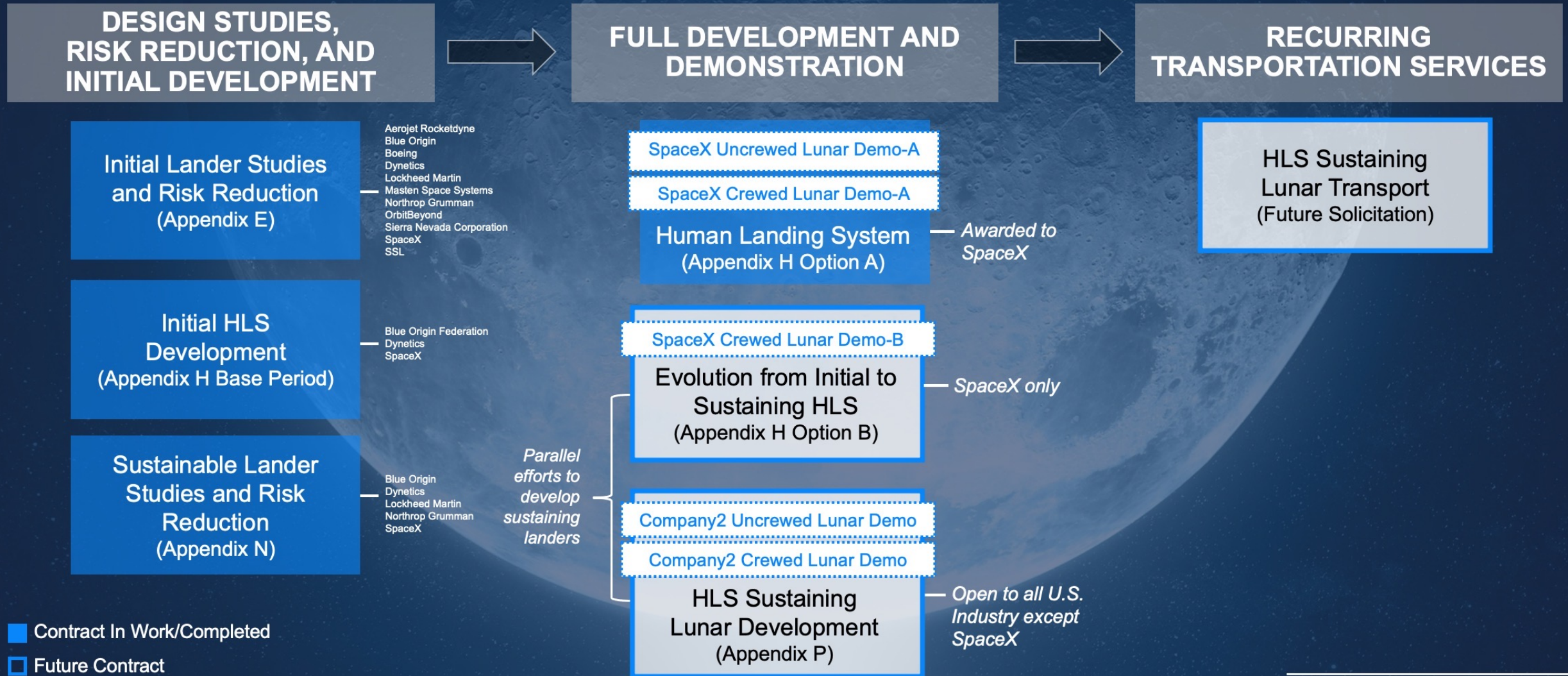
Mar 31, 2022

# NASA Invites U.S. Industry to Build Additional Astronaut Moon Landers





# Human Landing System (HLS) Procurement Path



- Contract In Work/Completed
- Future Contract
- Lunar Demo Flight



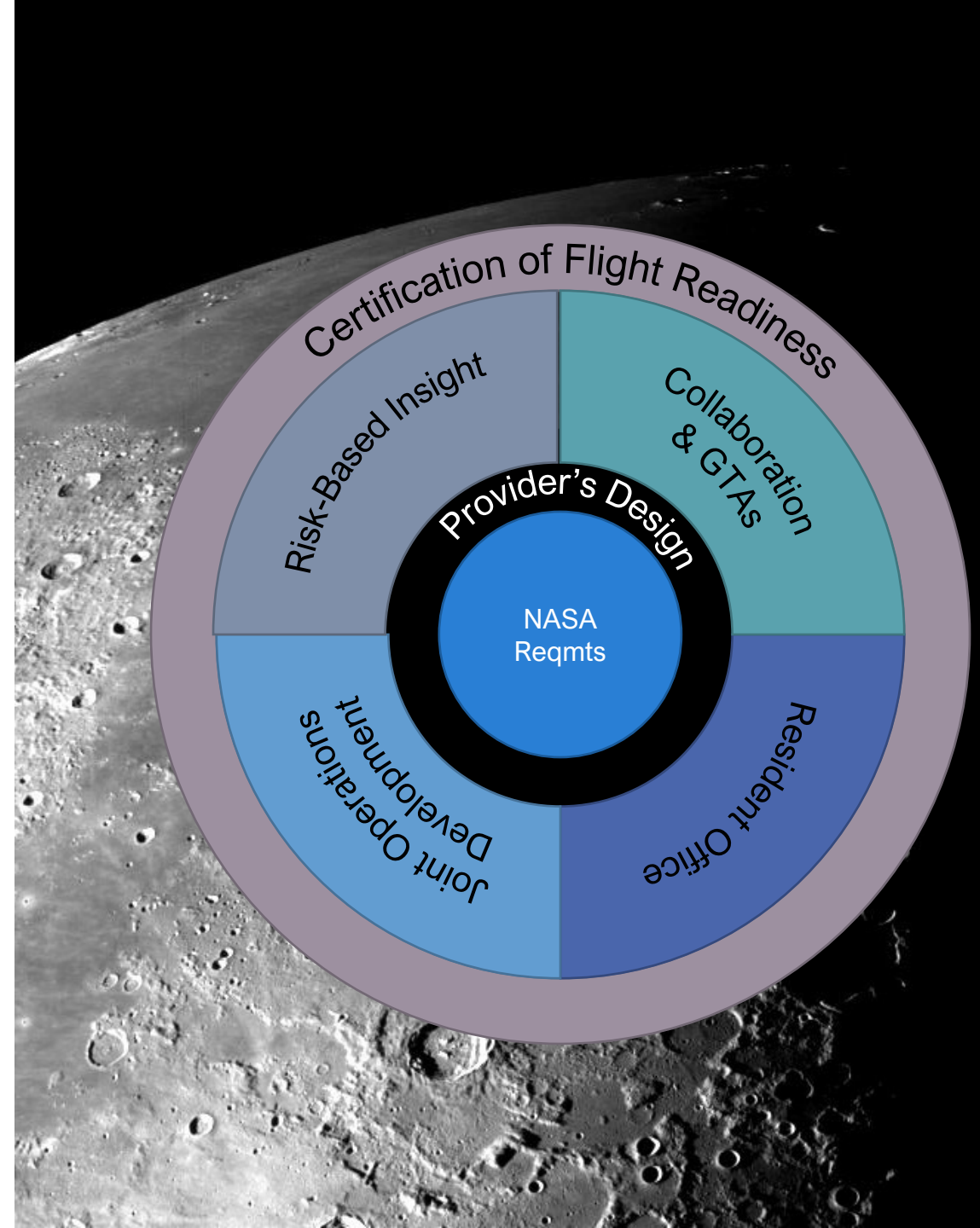
## Insight

- Risk based focusing on targeted areas of program concern
- Ensures HLS resources are applied efficiently, and that Providers are not overly burdened by excessive insight activity in low risk areas

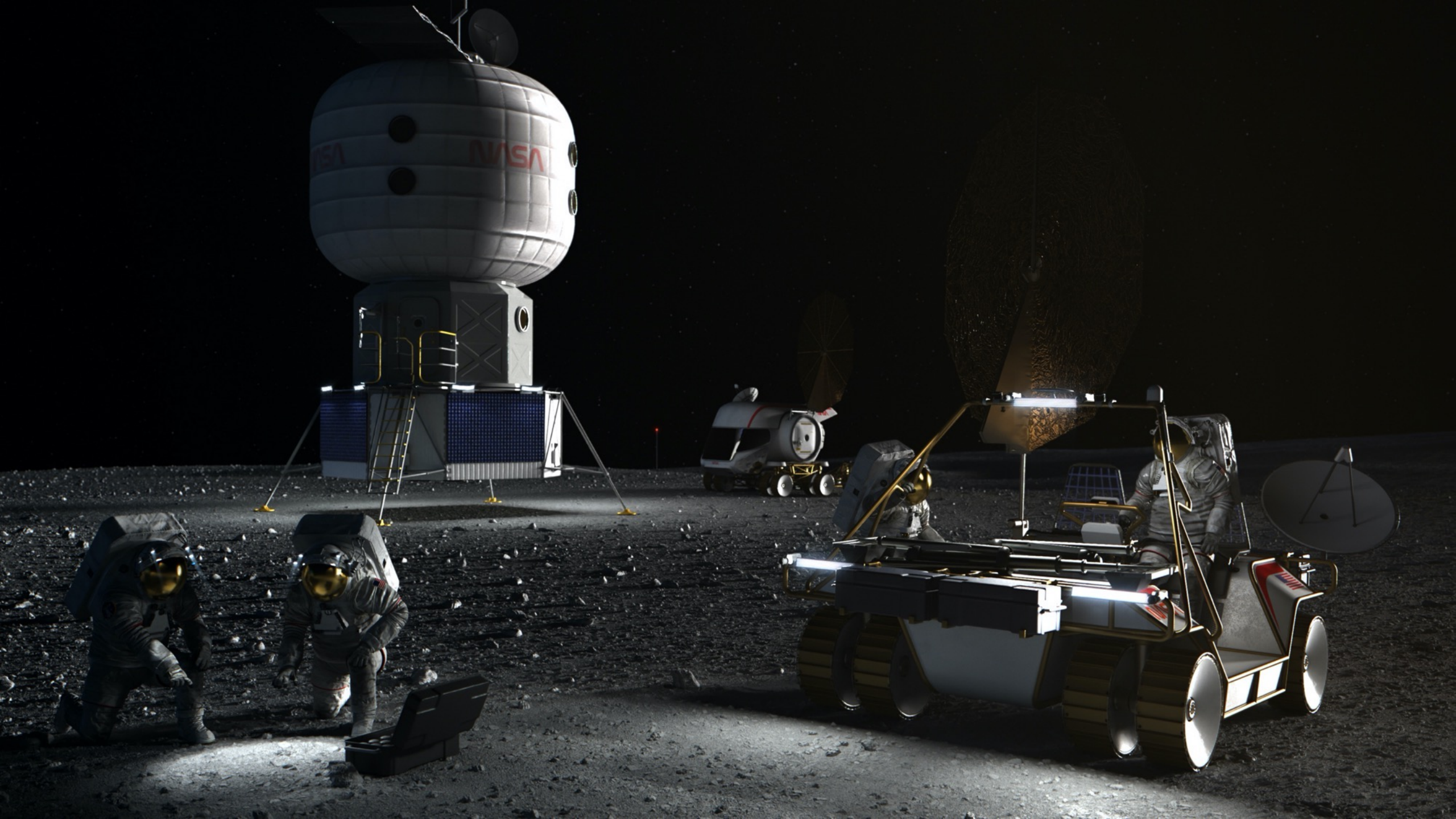
## Collaboration

- Personnel that are assigned to work with the Provider and part of their team
- Accomplish tasks that are specified by the Provider, and deliverable to the Provider as in-line work

**NASA maintains ultimate authority on certification for flight readiness.**









# LUNAR SOUTH POLE





# Taking the Next Giant Leap

*Humans on Mars*

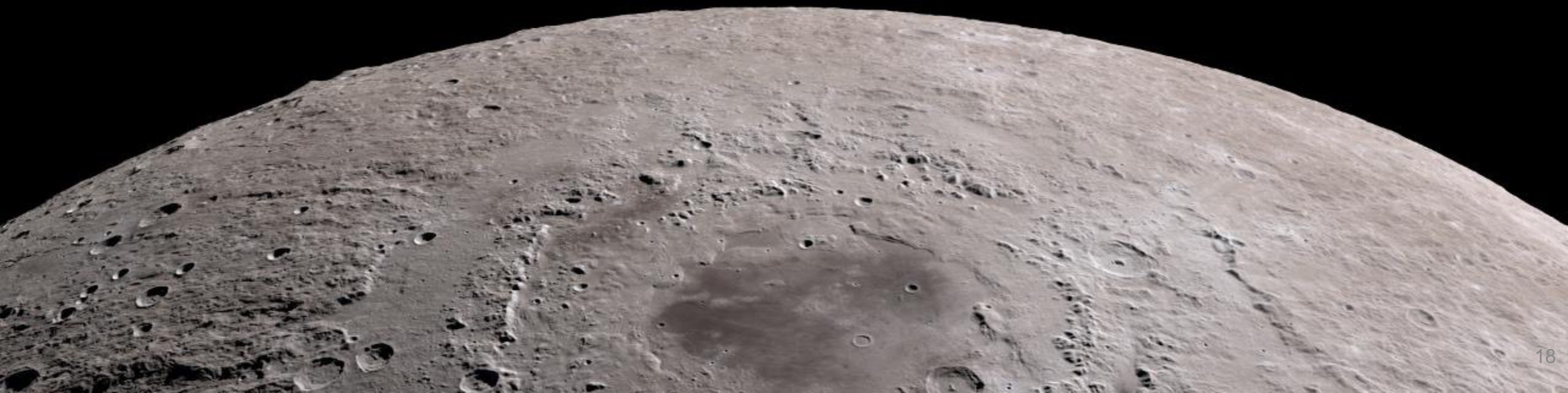
↖ Earth





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QUESTIONS?